

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
WASHINGTON, D.C. 20240

In Reply Refer To:  
1640 (360)

MEMORANDUM

To: Inspector General  
Attention: Assistant Inspector General for Audits

Through: Rebecca W. Watson  
Assistant Secretary, Land and Minerals Management

From: Kathleen Clarke  
Director, Bureau of Land Management

Subject: Response to Flash Report "Public Safety Issues at the Saginaw Hill Property" (No. C-IN-BLM-0013-2005)

The Bureau of Land Management (BLM) has reviewed the Flash Report for the Saginaw Hill Property, which is administered by the Arizona BLM Tucson Field Office. The Report expresses concerns regarding public safety at the site and makes several recommendations to the BLM, some of which we have already implemented. We appreciate the Inspector General's interest in the challenges the BLM faces in managing lands with hazardous substances and the physical safety issues associated with abandoned mines on public land and would like to enlist your support as the BLM continues to improve its process to protect the public health and safety.

**Report Response:** The BLM has the following responses to the report recommendations:

**Recommendation (1):**

- **Notify the National Response Center of the contamination at the Saginaw Hill Property.**

**The BLM Action:** The BLM reported the presence of contaminants of concern at the Saginaw Hill Property to the National Response Center (NRC) on March 17, 2005. However, the BLM was advised by the Solicitor's Office that Section 103(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) does not require BLM to report the site to the NRC.

**The BLM Policy Development:** The Flash Report recommends that the BLM report this site to the NRC. The requirement to report a site to the NRC is found in Section 103(a) of CERCLA, 42 U.S.C. Sec. 9603(a). Section 103(a) is intended to apply to emergency situations. The Environmental Protection Agency regulations at 40 CFR Part 302.6(a) require "any person in charge of a vessel or ... facility shall, as soon as he has knowledge of any release ... of a hazardous substance from such a vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this Part in any 24-hour period, immediately notify the National Response Center." Abandoned Mine Land (AML) sites typically do not involve releases that exceed the reportable quantity limit in a 24-hour period. Therefore, most hardrock AML sites will not be required to be reported under this provision.

The BLM acknowledges that it is possible that sites on public lands might meet the NRC reporting requirements, i.e., sites where a reportable quantity of a CERCLA hazardous substance is released over a 24-hour period. Therefore, the BLM will examine its current policies to determine what changes may be needed.

**Recommendation (2):**

- **Notify the public of the conditions at the site.**

**The BLM Action:** A draft Engineering Evaluation/Cost Analysis (EE/CA) was completed March 4, 2005, to support a non-time critical removal action in accordance with CERCLA. The BLM is reviewing the draft analysis, and a final version is expected to be completed by April 22, 2005, unless further site characterization is deemed necessary.

The current analysis involved the sampling of an offsite domestic well. A holding tank at this well was found to have elevated levels of lead and arsenic. The BLM immediately notified the well owner of the contamination levels. High evaporation rates and water chemistry in Arizona can lead to elevated concentrations of metals. The BLM sampled the well to determine whether it was contaminated or evaporation concentrated the metals in the tank. The BLM found that the concentration of metals in the water did not exceed drinking water standards. The well owner was also notified of these results.

A Community Relations Plan will be completed in concert with the EE/CA by April 22, 2005. The BLM will host meetings and provide fact sheets to the public as part of the implementation of the Community Relations Plan. The BLM will notify the public when the final EE/CA is ready for public review. The public will have 30 days to comment on the EE/CA.

**The BLM Policy Development:** The BLM Handbook H-1703-1 CERCLA Response Action Handbook outlines community relations requirements for sites contaminated with hazardous substances. To further ensure community relations activities meet National Contingency Plan (NCP) requirements, the BLM will include additional community

relations implementation guidance in the project management handbook currently being drafted.

**Recommendation (3):**

- **Take steps to prevent public access to contaminated areas on the Saginaw Hill Property.**

**The BLM Action:** The Report observed that the public has unrestricted access to contaminated mine wastes and open mine shafts. After the 2003 Preliminary Assessment (PA) identified the risk to the public posed by the mine wastes, the BLM erected fences and posted signs around the waste piles. Despite periodic patrols, one of the fences was vandalized and all of the signs were stolen. The fence was repaired, and new warning signs were installed in February 2005. The BLM has contracted for a stronger chain link fence to be installed, which will be completed by April 8, 2005. The chain link fence will remain until remediation is complete. Construction fencing also was erected around the mine shafts, and will remain until the closures are completed. In addition, the BLM has drafted a Federal Register Notice for a year-round use restriction for 20 acres around the two contaminated sites which provides BLM law enforcement officials the authority to restrict public access.

Currently, the BLM Tucson Field Office staff is working at the Saginaw Hill Property. The BLM law enforcement is also patrolling the area to protect the public and to increase public awareness.

**BLM Policy Development:** The BLM has not issued specific policy on preventing access to contaminated sites by the public. However, the BLM routinely fences, adds signage, and provides security measures to prevent access. The BLM will develop a specific Instruction Memorandum that will direct actions that must be taken when site contamination poses a threat to human health and safety.

**Recommendation (4):**

- **Conduct an inspection of the Saginaw Hill Property to identify all physical hazards presenting a safety risk to the public and take action to mitigate the hazards.**

**The BLM Action:** On February 22, 2005, the BLM staff conducted an onsite assessment and risk analysis. We concluded that the fence surrounding the tailings area must be repaired, new signs posted, and the 28 mine shafts and one adit must be closed to fully protect the public.

The BLM has verified that the adjacent school uses city water and is safe from possible water contamination. The BLM has initiated a search for ownership and use information for all water wells in the vicinity and has coordinated efforts with the Office of the Field Solicitor and Arizona State Mine Inspector. The BLM has procured and posted signs for

the contaminated site and physical safety hazards. Also, the BLM has repaired the fence surrounding the tailings.

The BLM has conducted bat surveys and is preparing an Environmental Assessment to expedite the closure of the remaining 28 mine shafts and one adit. Closures are planned for late April 2005.

The BLM Tucson Field Office prepared a letter to the current mining claimant to establish ownership of the mine workings and request immediate action to secure the mine workings. A special agent in California hand delivered the letter on March 22, 2005. The claimant contacted the BLM the next day and stated no objections to the BLM closing the shafts and cleaning up wastes.

The BLM is aggressively working to remediate the physical and environmental hazards at Saginaw Hill Property. The BLM will continue with the ongoing CERCLA removal action and pursue funding to do additional site characterization, community outreach, and to complete the EE/CA.

**Other Recommendations:**

- **The BLM should assess its lands to identify hazardous sites in close proximity to populated areas similar to Saginaw Hill. The BLM should inspect these sites and take appropriate action to mitigate any safety hazards.**

The BLM has two new databases, the Site Cleanup Module (SCM) and the Abandoned Mine Module (AMM), that identify contaminated sites and abandoned mine physical safety hazards on public land. More than 4,100 communities with a combined population of 22.2 million people are located within 25 miles of BLM managed lands. The BLM will develop a report on what resources will be needed to identify hazardous sites in close proximity to populations.

**Conclusion:** The BLM remains committed to protecting the health and safety of the public. We intend to continue our effort at the Saginaw Hill Property so that the site will be managed in the best interest of the United States. If you have any questions, please contact Nancy Dean, Group Manager, Protection and Response, at 202-557-3585, or Andrea Nygren, BLM Audit Liaison, at 202-452-5153.

Cc: AZCO/910 AZSO/420 ASLM(2) (6000MIB) 100/Hold (5600MIB)  
830/Hold-1000 LS 360/Hold

LLM: 360: LSB: MS: Kris Doebbler: vbb: 03/30/05: OIG Flash Report  
Revised: 04/01/05

## SUMMARY SHEET

**Subject:** Response to OIG Flash Report (No.C-IN- BLM- 0013- 2005) on Public Safety Issues at the Saginaw Hill Property.

**Background:** The Saginaw Hill Mine Site (the Site) is an abandoned mining area located 10 miles southwest of downtown Tucson, Arizona. It is located on a 540-acre isolated parcel of public land surrounded by private land that has seen a large amount of residential development in recent years. The site is located about 1 mile from the Pascua Yaqui Tribal lands; is in close proximity to an elementary school and gaming casino; and is frequented by off- highway vehicle enthusiasts. The site contains two abandoned mine sites with mine wastes that are the subject of an ongoing BLM Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal action using the Department's Central Hazardous Materials Fund (CHF). The 28 open mine shafts and one open adit located on the Site pose a risk to public safety.

The Saginaw Hill site is blanketed by 15 active lode mining claims which encompass the areas that contain the open mine features and waste piles. Active mining that created the mine features occurred around 1900. However, an active notice for mining was in effect from 1991 to 1994.

**Chronology of Site Activities:** Pima County became interested in the site for use as a regional park in 1988 and approached BLM with the prospect of acquiring the property. In 1988-89, Pima County conducted limited phase I and phase II Environmental Site Assessments which identified elevated concentrations of metals in the mine waste piles. Based on the results of the assessment, Pima County recommended that BLM conduct further studies to characterize the mine waste.

At about the same time, the Tucson Unified School District (TUSD) announced that it would build the Harriet Johnson Elementary School just east of the Saginaw Hill site. The TUSD officials and the Pascua Yaqui Tribe voiced concern about the dangers at Saginaw Hill. Throughout 1990 and 1991, BLM worked closely with the Office of the Arizona State Mine Inspector and the public to remediate dangers at Saginaw Hill. Standard operating procedure for the BLM Arizona State Office at that time was to ask the Arizona State Mine Inspector to remediate safety issues on active mining claims. Consequently, after several public meetings and television stories, the State Mine Inspector submitted a plan to BLM whereby it would notify mining claimants of their responsibilities to secure mine shafts, proceed to close mine shafts, conduct further assessment of the mine wastes, and take appropriate action to clean up the wastes.

The Arizona State Mine Inspector's Office began to implement the remediation plan by closing the most dangerous shafts with the help of industry in late 1991. The remainder

of the remediation plan was halted when a miner who held placer claims at the time submitted a mining notice to BLM that he was going to work the mine wastes, thus

preventing the AZ Mine inspector from further remediation work. At that time, when a mining claimant filed a notice under the General Mining Law regulations, the site was considered an active operation. The mining notices were in effect through 1994. Case files were closed at the time only after an on-the-ground inspection was conducted which verified that no additional surface disturbance had occurred and no reclamation was needed. The BLM found no evidence to indicate that the mining claimant removed or processed any of the waste material.

In 1997, one of the shafts that had been closed in 1991 collapsed. BLM took immediate action to close it again. Several more shafts were backfilled in 1999 after BLM received complaints from the local fire department about dumping in the shafts. These incidents prompted BLM to examine historic files, which suggested that there were elevated metals in the waste dumps and numerous open mine features and prompted BLM to repeatedly attempt to contact the mining claimants to secure the site. Efforts to contact the claimants failed.

In 2001, Pima County submitted an application to lease for the development of a trails park. As a result of BLM's review of the application and review of historic files, in 2001, BLM conducted preliminary sampling of the mine waste piles. This preliminary sampling led to the completion of a Preliminary Assessment (PA) by BLM in 2003. The PA identified toxic metals in mine wastes that exceeded the Arizona Department of Environmental Quality standards are also considered a risk under internal BLM Risk Management Criteria. Thus a CERCLA removal action was initiated to cleanup the hazardous substances prior to further review of the lease application by Pima County. In 2004, the BLM received CHF money to begin the Engineering Evaluation and Cost Analysis (EE/CA), Community Relations Plan and potentially responsible party search as part of the removal action.

**BLM Hazardous Materials Policy and Guidance:** Prior to 1999, the BLM did not have a national strategic direction for cleanup of contaminated sites such as Saginaw Hill. In 1999 and 2000, BLM developed a national strategic plan to reduce threats to public health, safety, and property by remediating or cleaning-up hazards. Part of that strategy was to increase external funding of BLM sites through the DOI CHF. Before 1999, the BLM had one site being funded for cleanup through the CHF. In 2005, the BLM has 20 sites being funded for cleanup through CHF.

Also prior to 1999, the BLM had no written policies on cleanup of sites with CERCLA hazardous substances. The CERCLA Response Action Handbook (H-1703-1), published in July 2001, is the first BLM handbook covering the subject. BLM also distributed an Instruction Memorandum in August 2000 "Mitigating and Remediating Physical Safety Hazards at Abandoned Mine Land Sites" that directs State and Field Offices to focus physical safety hazard mitigation for abandoned mines to those sites where a death or

injury has occurred and to sites located in immediate proximity to developed recreation sites and areas with high visitor use.

**Current Funding Status:** The BLM requested CHF funding for Saginaw Hill in Fiscal Year (FY) 2003 and received CHF money in FY 2004 as stated above. CHF does not fund mitigation of physical hazards such as the mine shafts and adits at Saginaw Hill. Limited funding is available for mitigation of all types of hazards through the Hazard Management and Resource Restoration budget subactivity (1640) base funding. In addition, a small amount of funding (approximately \$1.2 million) is available through the same budget subactivity as part of flexible funding for hazards and non-CERCLA hazardous substance cleanups, such as underground and above ground storage tanks, abandoned oil production disposal pits, and solid waste. The BLM Arizona State Office has shifted their FY 2005 1640 flexible funding to help address physical hazards at Saginaw Hill.